

17(1)

AUTHOR:

Kikayon, E. E.

SOV/20-125-3-61/63

TITLE:

Experimental Investigations of the Role of Local Obstacles to Blood-stream During the Development of Atherosclerotic Alterations in Arteries (Eksperimental'noye issledovaniye znacheniya mestnykh prepyatstviy dlya krovotoka v razvitii ateroskleroticheskikh izmeneniy arteriy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 3, pp 681-683 (USSR)

ABSTRACT:

It is well-known that in the complex theory of the pathogenesis of atherosclerosis the disturbances in the cholesterol metabolism play the leading part. Mechanical and hemodynamic effects upon the vascular wall are above all regarded as favorable factors (Ref 1). Since - according to his information - no special investigations have been carried out with respect to the problem mentioned in the title, the author studied the disturbance of local hemodynamic conditions of the localization of experimental atherosclerosis. 36 rabbits served for this experiment. Apart from their normal feed all animals were daily fed on 0.5 g cholesterol solved in 10 ml sunflower-seed oil.

Card 1/4

Experimental Investigations of the Role of Local      SOV/20-125-3-61/63  
Obstacles to Blood-stream During the Development of      Atherosclerotic  
Alterations in Arteries

After 1.5 - 2 months the right Carotis communis was ligatured in all animals 1 cm in distal direction from the branching of the art thyreoidea superior. At the same time the left Carotis was extracted, but not ligatured. It served for control purposes. After the operation the rabbits were still fed on cholesterin, after a period of between 18 days and 6 months they were killed. 2 animals were fed on cholesterin during a period of 1 and 1.5 years respectively. Among 36 rabbits in 31 animals atherosclerotic alterations occurred proximal to the ligatured point of the right Carotis. In 5 animals - they were only for a short time fed on cholesterin (1 month and somewhat longer) - no alterations occurred. In the left Carotis (not ligatured) only 5 rabbits showed the mentioned alterations, i.e. those animals that were fed on cholesterin for the longest period. In the remaining 31 the left Carotis remained unchanged. The changes in the right artery were according to the duration of cholesterin feeding and the ligature of the artery clearly marked. There were, however, exceptions in both directions. The A. thyreoidea was in all cases hypertrophied. The altered parts are described (Fig 1). To begin with small amounts of

Card 2/4

Experimental Investigations of the Role of Local      SOV/20-125-3-61/63  
Obstacles to Blood-stream During the Development of      ~~Athero~~sclerotic  
Alterations in Arteries

diffused and fine lipid drops were deposited between endothelium and the inner elastic membrane. They are almost always located around the whole artery, however, most abundantly on its dorsal wall. With progressing process the amount of lipoids rises which entails a rapid growing thicker of the intima. The main part of the lipoids is absorbed by the macrophages. In the control animals (no cholesterin) the lumen of the ligatured right artery was rather considerably contracted. Its wall was considerably thickened at the expense of a decrease of the Tunica media. The above investigation entails the question which conditions are responsible for the occurring of highly arteriosclerotic alterations in the ligatured artery at an earlier time than in the not ligatured artery.

Card 3/4

Experimental Investigations of the Role of Local  
Obstacles to Blood-stream During the Development of Atherosclerotic  
Alterations in Arteries SOV/20-125-3-61/63

The author describes some of these factors as possible. There are 1 figure and 7 references, 6 of which are Soviet.

ASSOCIATION: Institut eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR (Institute of Experimental Medicine of the Academy of Medical Sciences, USSR)

PRESENTED: December 7, 1958, by N. N. Anichkov, Academician

SUBMITTED: December 2, 1958

Card 4/4

KIRAYON, E. E., Doc Med Sci -- "Morphological bases of coronary  
insufficiency in stenotic arteriosclerosis of coronary ar-  
teries." Len, 1961. (State Order of Lenin Inst, Advanced *Med im S. M. Kirov*  
Med im S. M. Kirov) (KL, 8-61, 257)

- 412 -

KIKAYON, Ye.Ye.

Intercoronary anastomoses in the system of coronary arteries  
of the heart in stenosing atherosclerosis. Kardiologiya 1 no.5:  
83-89 '61 (MIRA 17:4)

*Kiklin A K*

STUDY OF THIN FILMS OF INTERMETALLIC COM-  
POUNDS. A. K. Kiklin and G. D. Fedorenko. Translated  
from Doklady Akad. Nauk S.S.S.R. 92, 1193-5(1958). 6p.  
(ASC-1-1948)

Thin films of Mg-Bi (1000Å) were prepared by depositing  
the components of the system on a glass base by simultane-  
ous evaporation in a vacuum. A narrow transparent band  
appeared on the thin film at the point where the composition  
corresponds to Mg<sub>2</sub>Bi<sub>3</sub>. The width of the transparent band  
increases with time, probably because of oxidation of the  
film in air. Films of Mg-As, Ca-Bi, and Ca-As also had  
a transparent band. (J.R.R.)

KIKELIDZE, M.A.; ARSENISHVILI, A.Yu.; PEROVA, V.V.; MANDZGALADZE, S.N.

Metallurgical characteristics of Sadakhlo, Adzhami, Darkveti, and  
Motsameti limestones [in Georgian with summary in Russian]. Trudy  
Inst. met. i gor. dela AN Gruz. SSR 2:175-197 '49. (MIRA 11:1)  
(Georgia--Limestone)



KIMBERL', E. P.

KIMBERL', E. P. -- "Investigation of the Possibility of Using Heavy Oils from Estonian Oil Shale for the Preservation of Lumber." Min Higher Education USSR. Leningrad Order of Lenin Inst of Railroad Transport Engineers imeni Academician V. V. Obratsev. Tallin, 1955. (Dissertation for the Degree of Candidate in Technical Sciences)

SOURCE Knizhnaya Letopis', No 6 1956

KIKETS, Yu.A. (Kremenets)

Historical information on the topic "Progression." Mat. v shkole  
no.1:38-44 Ja-F '56. (MLRA 9:4)  
(Mathematics--Study and teaching)

KIKETS', Yu.O.

History of negative numbers. Nauk.zap.Krem.derzh.ped.inst. no.4:130-142 '59.

(MIRA 13:9)

(Numbers, Theory of)

POLAND/Chemical Technology. Cellulose and its Derivatives.

H

Abs Jour: Ref. Zhur.Khimiya, No 12, 1958, 41912.

Author : Kikevich.

Inst : Not given.

Title : Suitability of the Haug's Refiners in View of the Most Recent Investigations.

Orig Pub: Przegl. papiern., 1955, 11, No 12, 356-364.

Abstract: The optimum working conditions of a refiner used on pulp is established. When the extent of the limit of the grinding is 40<sup>0</sup> ShR, the tearing length is equal to 2000m, the refiner's efficiency is four tons per twenty-four hours. The best grinding effect is achieved at a 14% concentration. A Haug's refiner requires elaborate attention.

Card : 1/1

28

KIKGOE, YU. A.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000722520006-7"

ZAGARMISTR, A.M., KUPALOV-YAROPOLK, I.K., PETROV, L.V., TYABIN, V.Ye., PEDORENKO, A.N., sostaviteli; DYUKOV, A.I., KLESHCHEV, A.I., redaktory.

[All-Union unified norms for geophysical field work] Vsesoiuznye edinye normy vyrabotki na polevye geofrafisheskie raboty. [Sostaviteli: Resnik A.M. i dr. Redaktory: A.I.Diukov, A.I.Kleshchev] Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1951. 146 p.

(MLRA 7:4)  
(Geophysics)

KIKHADZE, I.I., kand.biologicheskikh nauk

Work of a chromosome. Nauka i zhizn' 29 no.4:21-23 Ap '62.

(MIRA 15:7)

1. Zaveduyushchaya gruppoy obshchey tsitologii Instituta tsitologii  
i genetiki Sibirskogo otdeleniya AN SSSR.  
(CHROMOSOMES)

KIKHADZE, I.I.

Distribution of trace elements in intrusive rocks and minerals  
in the Tsam region (lower Svanetiya). Trudy GPI [Gruz.]  
no.2:115-126 '65. (MIRA 17:9)

KIKHADZE, V.D.; ABESADZE, A.I.; DOLIDZE, F.P. (Tbilisi)

Role of the liver in the blood coagulation system. Pat. fiziol. i  
eksp. terap. 5 no.6:61-62 N-D '61. (MIRA 15:4)

1. Iz Instituta perelivaniya krovi imeni akademika G.Mukhadze  
Ministerstva zdravookhraneniya Gruzinskoy SSR.  
(LIVER) (BLOOD--COAGULATION)

KIKHAREV, I. M.

(Terrestrial mollusc of the fauna of the U.S.S.R.) Moskva, 1952. 51p.  
(Akademiia nauk SSSR. Opredeliteli po faune SSSR, izdat amyo Zo-ologicheskii  
institutom, 43)



KIKHAYEVA, I.D.

September apricots. Konz.i ov.prom. 15 no.9:33 S '60.  
(MIRA 13:9)

1. Dagestanskiy sovnarkhoz.  
(Daghestan--Apricot--Varieties)

KIKHILEVICH, T.I., inzh.

Experience in the simultaneous treatment of received and transmitted data in the Minsk telegraph exchange. Vest. svyazi 22 no.1:25  
Ja '62. (MIRA 14:12)

1. Tekhnicheskiiy otdel Minskogo tsentral'nogo telegrafa.  
(Minsk--Telegraph)

KIKHIYA, S.S.

Rodent fauna of the Alazan' basin [in Georgian with summary in  
Russian]. Trudy Inst. zool. AN Gruz. SSR 16:87-105 '58.

(MIRA 11:12)

(Alazan' Valley--Rodentia)

DELIMARSKIY, Yu.K.; KIKHNO, V.S.

Determination of the zero points of some solid metals in a fused mixture of NaCl-KCl by measuring the double layer capacity. Ukr. khim. zhur. 31 no.1:116-117 '65. (MIRA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

DEINARSKIY, Ya.A.; FIRSH, V.A.

Determination of zero point of tantalum and beryllium in fused  
salts. Ukr. khim. zhur. 39 no.8:872-873 '65. (KIRA 12:9)

1. Institut khimicheskoy tekhnologii khimicheskoy khimii Ak. Nauk SSSR.

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26279  
S/073/61/027/004/003/004  
B127/B203

AUTHORS: Sheyko, I. N., Chernov, R. V., and Kikhno, V. S.

TITLE: Melting diagrams of some salt systems containing potassium fluozirconate. Communication I

PERIODICAL: Ukrainskiy khimicheskii zhurnal, v. 27, no. 4, 1961, 469-473

TEXT: For obtaining metallic zirconium, the electrolysis of salt melts is used; the melting diagrams of these salts were studied by the authors.

Primarily,  $\text{KF-K}_2\text{ZrF}_6$ ;  $\text{KCl-K}_2\text{ZrF}_6$ ;  $\text{KCl-K}_3\text{ZrF}_7$ ;  $\text{NaCl-K}_2\text{ZrF}_6$ ;

$\text{KCl-NaCl-K}_3\text{ZrF}_7$ . The studies were conducted by the visual-polythermic

method. Arrangement: A platinum pot placed in quartz was arranged in an electric furnace with a Pt-Pt-Rh thermocouple in argon atmosphere; results are given in Figs. 1 - 5. All systems melt congruently; the systems

$\text{KCl-K}_3\text{ZrF}_7$  and  $\text{KCl-NaCl-K}_3\text{ZrF}_7$  show a simple eutectic;  $\text{K}_2\text{ZrF}_6$ , however,

melts incongruently, and the salt  $\text{K}_3\text{ZrF}_7$  first crystallizes out of its

melt. There are 5 figures and 6 references: 4 Soviet and 2 non-Soviet.

Card 1/7

26279

S/073/61/027/004/003/004

B127/B203

Melting diagrams of some salt systems ...

The two references to English-language publications read as follows:

Ref. 3: M. Steinberg, M. Sibert, E. Wainer, J. Electrochem. Soc., 101, 63 (1954); 103, 137 (1955); Ref. 5: C. I. Barton, W. R. Crimes, H. Insley, R. E. Moore, R. E. Throma, J. physic. chem., 62, 665 (1958).

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR  
(Institute of General and Inorganic Chemistry AS UkrSSR)

SUBMITTED: April 29, 1960

Fig. 1. System  $\text{KF-K}_2\text{ZrF}_6$

Fig. 2. System  $\text{KCl-K}_2\text{ZrF}_6$

Fig. 3. System  $\text{KCl-K}_3\text{ZrF}_7$

Fig. 4. System  $\text{NaCl-K}_2\text{ZrF}_6$

Fig. 5. System  $\text{KCl-NaCl-K}_3\text{ZrF}_7$

Card 2/7

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S/826/62/000/000/004/007  
D408/D307

5.4700

AUTHORS: Sheyko, I.N., Chernov, R.V. and Kikhno, V.S.

TITLE: Phase diagram of the chloride-fluoride system of sodium, potassium, and zirconium

SOURCE: Fizicheskaya khimiya rasplavlennykh soley i shlakov; trudy Vses. soveshch. po fiz. khimii raspl. soley i shlakov, 22 - 25 noyabrya 1960 g. Moscow, Metallurgizdat, 1962, 72 - 76

TEXT: The authors investigated the behavior of molten  $K_2ZrF_6$  on cooling and the phase diagrams of the systems  $K_2ZrF_6$ --KCl,  $K_2ZrF_6$ --NaCl,  $K_2ZrF_6$ --KF,  $K_3ZrF_7$ --KCl,  $K_3ZrF_7$ --NaCl, and  $K_3ZrF_7$ --KCl--NaCl by the cooling curve method, in order to make good deficiencies in the literature concerning potential electrolytic production of Zr.  $K_3ZrF_7$  was prepared by fusing together the appropriate amounts of KF and  $K_2ZrF_6$  melted incongruently and, when the melt was cooled,  $K_3ZrF_7$  was the first compound to crystal-  
Card 1/3



Phase diagram ...

S/826/62/000/000/004/007  
D408/D307

lize out, at 757°C. A thermal effect observed at 591°C probably corresponded to the formation of the compound  $\text{ZrF}_4 \cdot m\text{KF}$ , where  $m < 3$ . The phase diagram of the  $\text{K}_2\text{ZrF}_6$ --KF system showed the formation of  $\text{K}_3\text{ZrF}_7$ , melting at 921°C, and a eutectic containing 17 mol.%  $\text{K}_2\text{ZrF}_6$ , which melted at 766°C. The systems  $\text{K}_3\text{ZrF}_7$ --KCl, equimolar KCl - NaCl mixture-- $\text{K}_3\text{ZrF}_7$ , and  $\text{K}_3\text{ZrF}_7$ --NaCl were also found to be relatively simple, having single eutectics containing 23, 21 and 20 mol.%  $\text{K}_3\text{ZrF}_7$  and melting at 660, 630 and 555°C respectively; a solid solution of NaCl in  $\text{K}_3\text{ZrF}_7$  was also observed in the  $\text{K}_3\text{ZrF}_7$ --NaCl system. The  $\text{K}_2\text{ZrF}_6$ --KCl system was characterized by the presence of the compound  $\text{K}_3\text{ZrF}_6\text{Cl}$ , congruently melting at 730°C, and two eutectics containing 23 and 95 mol.%  $\text{K}_2\text{ZrF}_6$  melting at 678 and 562°C respectively. The  $\text{K}_2\text{ZrF}_6$ --NaCl system was the most complex of systems investigated, and interpretation of the obtained results is difficult. The liquids curve consists of three branches, the NaCl and  $\text{K}_3\text{ZrF}_6\text{Cl}$  branches intersecting at 550°C and 28 mol.%  $\text{K}_2\text{ZrF}_6$ , and  $\text{K}_3\text{ZrF}_6\text{Cl}$  and  $\text{K}_3\text{ZrF}_7$  branches intersecting at 630°C and 79 mol.%  $\text{K}_2\text{ZrF}_6$ . The existence of the  $\text{K}_3\text{ZrF}_6\text{Cl}$  was deduced from experiments

Card 2/3

Phase diagram ...

S/826/62/000/000/004/007  
D408/D307

carried out by the method of temperature depression, whereby the addition of KCl to the melt containing 60 - 65 mol.%  $K_2ZrF_6$  increased the temperature of initial crystallization, and with further addition of KCl the rate of temperature rise slowed down, or the temperature even partially decreased; addition of  $Na_2ZrF_6$  decreased the temperature of initial crystallization. There are 6 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR  
(Institute of General and Inorganic Chemistry AS  
UkrSSR)

X

Card 3/3

SHEYKO, I.N.; KIKHNO, V.S.; MEL'NIKOV, V.I.

Melting diagram of the ternary system NaF - KF -  $ZrF_4$ . Ukr.khim.  
zhur. 29 no.12:1259-1264 '63. (MIRA 17:2)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

L 20758-65 EWT(m)/T ASD(m)-3 RWH

ACCESSION NR: AP5000476

S/0073/64/030/011/1158/1158

AUTHOR: Delimarskiy, Yu. K.; Kikhno, V. S.

TITLE: Determination of the zero points of certain solid metals in molten NaCl-KCl mixtures by measuring the capacitance of the double layer

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 11, 1964, 1156-1158

TOPIC TAGS: nickel, silver, chromium, manganese, zero point

ABSTRACT: The capacitance was measured of the double layer between solid Ni, Ag, Cr and Mn electrodes and the molten NaCl-KCl electrolyte under dry argon at 700C. In all the capacitance-potential curves the capacitance of the double layer decreased to a minimum with increasing cathodic polarization, and then increased; the potential minimum depended only on the metal. In comparison to a silver electrode the values, in volts, were: Ni, -0.72; Ag, -0.80; Cr, -1.16; Mn, -1.70. The capacitance minima were higher for solid electrodes than for the corresponding liquid electrodes. The actual surface of the solid metal in compar-

Card 1/2

L 20758-65

ACCESSION NR: AP5000476

ison to the apparent surface was calculated from these capacitance values: for Ni and Ag the coefficient was 3-3.5; for the more porous Cr and Mn, the value was higher. The zero point of Ag in comparison to a chlorine electrode was -1.89v. Orig. art. has: 1 figure

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN Ukr SSR (Institute of General and Inorganic Chemistry AN Ukr SSR)

SUBMITTED: 23Apr64

ENCL: 00

SUB CODE: IC, GC

NO REF SOV: 008

OTHER: 003

Cord2/2

PROZOROV, V., polkovnik; KIKHTENKO, G., polkovnik; DUBROVIN, K.,  
polkovnik zapasa

Rifle units in attack. Voen. vest. 41 no.4:39-41 Ap '62.  
(MIRA 15:4) .  
(Attack and defense (Military science))

KHLEBNIKOV, Yu.P.; KIKHTENKO, V.A.

New cyclone-type air filter with automatic dust removal. Trakt. i  
sel'khoz mash. 31 no.12:3-4 D '61. (MIRA 15:1)

1. Gosudarstvennoye spetsial'noye byuro po dvigatelyam.  
(Air filters)

KIKHTENKO, V.A.; KHLEBNIKOV, Yu.P.; YEGOROV, I.M., kand. tekhn. nauk, retsenzent; DVOROVENKO, G.P., kand. tekhn. nauk, red.; YEGORKINA, L.I., red. izd-va; EL'KIND, V.D., tekhn. red.

[Cyclone air cleaners for tractors] Traktornye tsiklonnye vozdukhochistiteli; konstruktsia, raschet, obsluzhivanie i ispytanie. Moskva, Mashgiz, 1963. 150 p.

(MIRA 16:7)

(Tractors--Equipment and supplies) (Air filters)



ACC NR: AP/000800

(A, N)

SOURCE CODE: UR/0089/66/021/005/0395/0397

AUTHOR: Degtyarev, S. F.; Kikhtevich, V. I.; Tikhonov, V. K.; Tsypin, S. G.

ORG: none

TITLE: Dependence of the accumulation factor of fast neutrons on the relative arrangement of the shield and detector

SOURCE: Atomnaya energiya, v. 21, no. 5, 1966, 395-397

TOPIC TAGS: fast neutron, neutron radiation, radiation intensity, lithium compound, neutron shielding, neutron distribution, *neutron detector*

ABSTRACT: The authors present results of an experimental and theoretical investigation of the dependence of the flux of fast neutrons with energy  $E > 0.7$  Mev on the distance R for a constant distance between the source and the shield. The shielding barriers used were plates of lithium hydride 45 and 60 cm thick and of density 0.5 g/cm<sup>3</sup>. The transverse dimensions of the plates were chosen such that the detector placed inside the shield or on its surface was under conditions of so-called infinite geometry. The neutron flux was registered by scintillation counters of ZnS(Ag) powder pressed in Plexiglas. The quantities measured directly were the fast-neutron flux on the surface of the shield and the flux at a distance R from the shield. The background was determined by suppressing the primary effect with the aid of an additional shield. In the reduction of the data use was made of earlier investigations of the authors, reported in the same source (p. 392, Acc. Nr. AP/000798) of the

Card 1/2

UDC: 539.125.52: 539.121.72

ACC NR: AP7000800

angular distribution of neutrons. The experimental values obtained for the build up factor as a function of the distance from the shield to the detector are found to be in agreement with formulas derived on the basis of numerous published theoretical papers. The results show that, with increasing distance from the shield, the fraction of the scattered radiation in the total neutron flux decreases, and the fraction of the unscattered radiation increases. Orig. art. has: 4 figures and 7 formulas.

SUB CODE: 2018/

SUBM DATE: 05Jul66/

ORIG REF: 005/

OTH REF: 001

Card 2/2

ACCESSION NR: AP4031139

S/0056/64/046/004/1208/1211

AUTHORS: Il'in, R. N.; Kikiani, B. I.; Oparin, V. A.; Solov'yev, Ye. S.; Fedorenko, N. V.

TITLE: Dissociation of positive hydrogen ions in collisions with atoms and gas molecules

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 4, 1964, 1208-1211

TOPIC TAGS: proton cross section, hydrogen, nitrogen, helium, argon, particle collision, ionization phenomena

ABSTRACT: The purpose of the work was to repeat the measurements of the cross section for the production of protons following dissociation of molecular ions  $H_2^+$  with energy 10--180 keV in hydrogen, nitrogen, helium, and argon, using the same setup as previously (ZhETF v. 36, 385, 1959), but with a more thorough elimination of the main sources of the systematic errors. Comparison of the data obtained

Card 1/3

ACCESSION NR: AP4031139

on these cross sections with the work published by others shows that over a wide energy range the majority of the curves obtained in recent work lies between the data of Sweetman (Proc. Roy. Soc. v. A256, 416, 1960 and private communication) and the early work by the authors, with the exception of the early data by C. F. Barnett (Second UN Intern. Conf. on Peaceful Uses of Atomic Energy, Geneva, 1958, Report 1789) which lie considerably below. Taken together, the various data cover almost the whole range of kiloelectron volt energies. For hydrogen, the maxima discovered and reported in the early work are confirmed, the first being due to the predominant contribution of the dissociation of  $H_2^+$  ions into atoms and protons, and the second being related to the dissociation into two protons. A separate measurement of these two cross sections by J. Guidino (C. R. Paris, v. 253, 829, 1961) confirms these results. Orig. art. has: 4 figures and 1 formula.

Card 2/3

ACCESSION NR: AP4031139

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR  
(Physicotechnical Institute AN SSSR)

SUBMITTED: 18Oct63

DATE ACQ: 07May64

ENCL: 00

SUB CODE: NP, GP

NR REF SOV: 005

OTHER: 006

Card 3/3

L 13651-65 EWT(1)/EWO(k)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EEC(b)-2/EWA(m)-2  
PI-1/PO-1/Pz-6/Pab-10 IJP(a)/ESD(t) AT

ACCESSION NR: AP4047890

B/0056/64/047/004/1235/1242

AUTHORS: Il'in, R. N.; Kikiani, B. I.; Oparin, V. A.; Solov'yev,  
Ye. S.; Fedorenko, N. V.

TITLE: Formation of highly excited hydrogen atoms in proton charge exchange in gases

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 4, 1964, 1235-1242

TOPIC TAGS: hydrogen, charge exchange, excited state, proton interaction

ABSTRACT: The purpose of the work was to study the efficiency of proton charge exchange in highly excited states of H in molecular gases, for which there are practically no data. The hydrogen atoms had principal quantum numbers  $n \geq 8$ , the proton energies were 16--180 keV, and the molecular gases investigated were  $H_2$ ,  $N_2$ , and  $CO_2$ .

Cord 1/4

L 13651-65

ACCESSION NR: AP4047890

The method used to measure the relative number of highly excited atoms in an atomic beam, using dissociating electric fields, was suggested by A. C. Riviere and D. R. Sweetman (Nucl. Fusion Suppl. 1962, Part 1, p. 279; Phys. Rev. Lett. v. 5, 560, 1960). The experimental setup is shown in Fig. 1 of the enclosure. The integral dependence of the proton current  $I(E)$  was measured under single-collision conditions, and was found to be the same, within 15%, for all gases except molecular hydrogen, which gave values of  $I$  about 30% higher than nitrogen and carbon dioxide. The differential dependence  $dI/dE$  was also measured, and the results used to determine the relative population of the states. To determine the number of highly excited hydrogen atoms compared with the primary proton beam, the variation of the relative yield with the thickness of the gas target was also studied and was found to increase with increasing target thickness up to 0.1 torr-cm, at which a charge equilibrium was established in the beam. The relative yield of highly excited atoms was determined by ionizing them in a strong electric field (the

Card 2/4

L 13651-65

ACCESSION NR: AP4047890

6

Lorentz ionization). An estimate of the cross sections for the capture into the state with  $n = 10$  gave values of  $10^{-19}$ -- $10^{-20}$  cm<sup>2</sup> for the investigated cases. Some depletion of the highly excited states was observed with increase of target thickness in the yield of highly excited atoms relative to the atomic beam. "The authors thank N. N. Lebedev and I. P. Skal'skaya for calculating the fields in the gap, and I. F. Kalinkevich, I. T. Barenkov, and V. V. Bagayev for development of the electronic equipment." Orig. art. has: 5 figures, 3 formulas, and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe Akademii nauk SSSR (Physicotechnical Institute, Academy of Sciences SSSR)

SUBMITTED: 07May64

ENCL: 01

SUB CODE: NP

NR REF SOV: 007

OTHER: 007

Cord 3/4



I 13651-55

ACCESSION NR: AP4047890

ENCLOSURE: 01

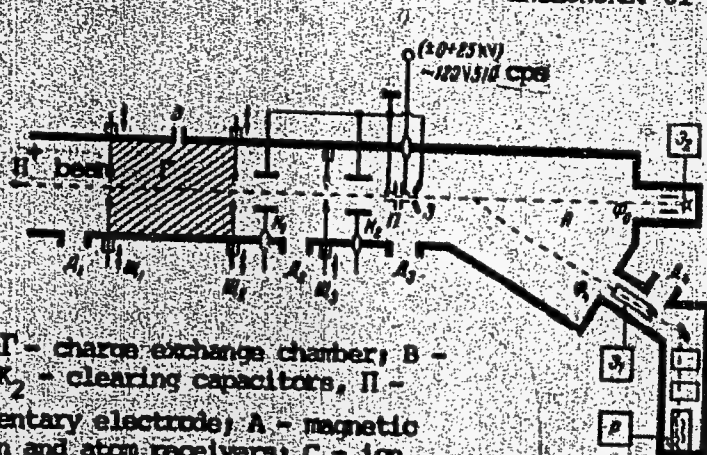


Fig. 1. Diagram of setup: Г - charge exchange chamber; В - gas inlet to chamber; К<sub>1</sub>, К<sub>2</sub> - clearing capacitors; П - breakdown gap; З - supplementary electrode; А - magnetic analyzer; Ф<sub>+</sub>, Ф<sub>0</sub> - proton and atom receivers; С - ion counters; Э<sub>1</sub>, Э<sub>2</sub> - electrometers; Р - phase sensitive recording circuit; И - collimating slits; Д - vacuum pumps

Card 4, 4

L 10672-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) MD/JG  
 ACC NR: AP5028324 SOURCE CODE: UR/0057/65/035/011/2076/2082 89  
 44,55 44,55 44,55 88  
 AUTHOR: Flaks, I.P.; Kikiani, B.I. Ogurtsov, G.N. B  
 ORG: Physico-technical Institute im. A.F.Ioffe, AN SSSR, Leningrad (Fiziko-  
 tekhnicheskii institut AN SSSR)  
 TITLE: Ionization of gases by alkali metal ions  
 SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 11, 1965, 2076-2082  
 TOPIC TAGS: inert gas, alkali metal, positive ion, ionization cross section,  
 nitrogen, hydrogen, *gas ionization*  
 ABSTRACT: The cross sections for ionization of H<sub>2</sub> and N<sub>2</sub> molecules and He, Ne, Ar, Kr, and Xe atoms by 1-30 keV Li<sup>+</sup>, Na<sup>+</sup>, K<sup>+</sup>, and Cs<sup>+</sup> ions were measured with apparatus and techniques that have been described elsewhere (I.P.Flaks, ZhTF, 31, 367, 1961; B.I.Kikanin, G.N.Ogurtov, N.V.Pedorenko, and I.P.Flaks, ZhTF 49, 379, 1965), and the results are presented graphically, discussed, and compared with the results of other investigators and with the theory of O.B. Firsov (ZhETF, 36, 1517, 1959). The beam current was 10<sup>-7</sup>-10<sup>-8</sup> A; the pressure in the collision chamber was kept below 1.5 x 10<sup>-4</sup> mm Hg in order to minimize multiple collisions; the ionization cross sections were derived from measurements of the electron currents. The results were found to be in good agreement with those of W.Sherwin (Phys.Rev., 57, 814, 1940) and J. van Eck, F.J. de Heer, and J. Kistemaker (Proc. V Int. Conf. on Ioniz. Phenom. in Gases, 54, UDC: 537.56  
 Card 1/3

L 10672-66

ACC NR: AP5028324

Munich, 1964). Larger cross sections were found by C.A.Frische (Phys.Rev., 43, 160, 1933) and N.V.Fedorenko (ZhTF 31, 367, 1961). The discrepancy between the present  $\text{Na}^+$ --Ar cross sections and those of Fedorenko are ascribed to incorrect pressure measurements by Fedorenko. The interactions of Ar and Kr with  $\text{Na}^+$ ,  $\text{K}^+$ , and  $\text{Cs}^+$ , of Ne with  $\text{Na}^+$  and  $\text{K}^+$ , and Xe with  $\text{K}^+$  and  $\text{Cs}^+$  satisfied the conditions for the applicability of Firsov's statistical theory (loc. cit.). The measured ionization cross sections lay close to Firsov's universal curve, and it is concluded that Firsov's approximate theory affords a useful description of the magnitudes and energy dependences of the cross sections for ionization of inert gases by alkali metal ions. All the cross sections increased monotonically with increasing energy of the bombarding ion. With the two exceptions noted below, the cross section for ionization of an inert gas atom by an alkali metal ion was very nearly equal to the cross section for ionization of the same inert gas atom by the corresponding neutral alkali metal atom. The two exceptions found to this rule are: 1) The measured cross sections for ionization by  $\text{Cs}^+$  ions were considerably greater than the corresponding cross sections for ionization by Cs atoms. This is ascribed to appreciable contribution of electron stripping from the  $\text{Cs}^+$  ion to the measured cross sections for ionization by  $\text{Cs}^+$  ions. (The cross sections for ionization by Cs atoms were measured by a different technique (Flaks (1961), loc. cit.) and electron stripping from the Cs atoms did not contribute to the observed cross sections.) 2) Except for ionization of He by  $\text{Li}^+$ , the cross sections for ionization of inert gases by alkali metal ions having the same electron

Card 2/3

L:10672-66

ACC NR: AP5028324

shell structure were considerably greater than the cross sections for ionization of  
the same inert gases by the corresponding alkali metal atoms. Orig. art. has:  
8 figures 21

SUB CODE: 20

SUBM DATE: 15Apr65/

ORIG. REF: 005

OTH REF: 010

Card 5/8

L 01217-66 EWT(1)/EWT(m)/EWP(b)/EWP(t) IJP(c) JD/JG

ACCESSION NR: AP5021095

UR/0056/65/049/002/0379/0385

AUTHOR: Kikiani, B. I.; Ogurtsov, G. N.; Fedorenko, N. V.; Flaks, I. P.

TITLE: Ionization produced during collisions of alkali metal atoms with gas molecules

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 2, 1965, 379-385

TOPIC TAGS: collision, collision cross section, gas ionization, alkali metal, atom

ABSTRACT: The results are presented of extensive investigations of ionizing collisions between Li, Na, K, and Cs fast atoms and He, Ne, Ar, Kr, and Xe atoms and H<sub>2</sub> and N<sub>2</sub> molecules. The study was performed in the 3—30 kev energy range. The average results of independent measurements are presented in a table which gives the cross sections of free electron production and of ionization and stripping cross sections. When possible, the data obtained were compared with those of other authors. A comparison of ionization cross sections of gases with stripping cross sections of alkali metal atoms showed in many cases the prevalence of ionization events. It is stressed, however, that in the interactions of alkali metal molecules with the molecules of H<sub>2</sub> and N<sub>2</sub>, the stripping cross sections prevailed over the ionization cross sections of the molecules in the whole range of energies. This

Card 1/2

L 01217-66

ACCESSION NR: AP5021095

3  
difference was most marked in Li-H<sub>2</sub> and Na-H<sub>2</sub> collisions, i.e., in the collisions of the lightest particles. As a rule, the ionization cross sections showed a continuous increase with the increasing velocity of the colliding particles. At a given velocity, the cross sections increased with the increasing atomic numbers of the particles. Here, however, an exception was observed for pairs with close values of their atomic numbers (e.g., Li-He, Na-Ne, K-Ar, Cs-Xe). The authors feel that their work may be useful in the corpuscular diagnosis of plasmas, and in the study of ionic engines, astrophysics, and mass-spectrometry. Orig. art. has: 3 figures, 1 table, and 3 formulas. [ZL]

ASSOCIATION: Fiziko-tehnicheskii institut im. A. F. Ioffe Akademii nauk SSSR  
(Physicotechnical Institute, Academy of Sciences, SSSR)

SUBMITTED: 23Feb65

ENCL: 00

44.55  
SUB CODE: NP

NO REF SOV: 007

OTHER: 005

ATD PRESS: 4098

NA  
Card 2/2

L 25499-66 EWT(1)/ENT(m) IJP(c) JD/JG

ACC NR: AP6011395

SOURCE CODE: UR/0057/66/036/003/0491/0496

AUTHOR: Ogurtsov, G.N.; Flaks, I.P.; Kikiani, B.I.

ORG: Physicotechnical Institute im. A.F.Ioffe, AN SSSR, Leningrad (Fiziko-tekh-nicheskii institut AN SSSR)

TITLE: Charge exchange of alkali metal ions in collisions with gas atoms and molecules

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 3, 1966, 491-496

TOPIC TAGS: charge exchange, particle cross section, alkali metal, neon, argon, krypton, xenon, nitrogen, hydrogen, collision cross section

ABSTRACT: The charge exchange cross sections of 1 to 30 keV  $\text{Li}^+$ ,  $\text{Na}^+$ ,  $\text{K}^+$ , and  $\text{Cs}^+$  ions on Ne, Ar, Kr, and Xe atoms and  $\text{H}_2$  and  $\text{N}_2$  molecules have been measured by a single collision technique. The authors have described their apparatus in detail elsewhere (ZhETF, 49, 379, 1965; ZhTF, 35, 2076, 1965; ZhTF, 29, 1100, 1959). The ion beam passed through the collision chamber containing the target gas at a pressure of about  $1.5 \times 10^{-4}$  Hg and was swept clear of charged particles by an electrostatic field. The neutral particles remaining in the beam were received in a Faraday cup and their flux was determined from the secondary electron emission to which they gave rise. A background flux measured with the collision chamber empty was subtracted from the measured flux before the cross section was computed. The geometry was such

Card 1/2

L 25499-66

ACC NR: AP6011395

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that particles scattered through angles less than  $5^\circ$  would be recorded. It is estimated that at energies below 3 keV, loss of particles from the beam by scattering may have resulted in underestimation of the cross section by as much as 20%. All the measured charge exchange cross sections increased with increasing relative velocity of the colliding particles, as would be expected on the basis of the adiabatic hypothesis in view of the large energy defects. The cross sections at 30 keV ranged from  $10^{-17}$  to  $3 \times 10^{-16}$  cm<sup>2</sup>. The cross sections of the different alkali metal ions on the same target gas and for the same relative velocity increased with increasing mass of the ion, even though the energy defects are greater for the heavier ions. This phenomenon is explained as a result of the greater polarizability of the heavier alkali metal atoms. The present results are in good agreement with those of N.V. Fedorenko (ZhTF, 24, 2113, 1954) for Na<sup>+</sup> on Ar and with those of S.K. Allison, J. Cuevas, and M. Garcia-Munoz (Phys. Rev., 120, 1266, 1960) for Li<sup>+</sup> on N<sub>2</sub> but there are large discrepancies between the present results and other data in the literature. The authors thank N.V. Fedorenko for his interest and valuable advice, and G.V. Dubrovskiy for discussing the results. Orig. art. has: 3 formulas, 6 figures and 1 table.

SUB CODE: 20

SUBM DATE: 26May65

ORIG. REF: 004

OTH REF: 008

Cord 2/2 CC



KIKIC, S.

Yugoslavia (430)

Technology-Periodicals

The power of installed hydroelectric power stations.  
p. 7. ELEKTROPRIVREDA. (Savet za energetiku i  
ekstraktivnu industriju) Beograd. (Monthly journal  
on power and extractive industry issued by the Board  
of Power and Extractive Industry; with English, French  
or Russian summaries). Vol. 3, nos. 11 (A-E), Nov.-  
Dec. 1952.

East European Accessions List, Library of Congress,  
Vol. 2, no. 6, June 1953. Unclassified.

KIKIC, Sava (Engr.)

"The Problem of Directing the water from the Drina River watershed to the Morava and Kolubara Rivers watershed".

~~Mr. A. Belgrade, 1955-56, 26 April 1956, "Zgradnja" No. 1-2 for Jan. & Feb. 1954, 1954 info., Unclass.~~

STEIN, Wladyslaw; KIKIELA, Marian

Two familial cases of Oguchi's diseases. Klin. oczna 26 no.3:  
227-234 1956.

1. Z Oddzialu Neurologicznego i Okulistycznego Wojkowego  
Szpitala Klinicznego Ordynator ODDz. Neurol.: doc. dr. med.  
W. Stein. Lodz, ul. Zeromskiego 113.

(NIGHT BLINDNESS,

Oguchi's dis., familial cases (Pol))

KIKIELA M.

EXCERPTA MEDICA Sec 12 Vol 13/9 Ophthalmology Sept 59

1362. SEVERE OCULAR COMPLICATIONS IN THE COURSE OF VACCINIA VIRUS INFECTION - Ciężkie powikłania oczne w przebiegu zakażenia krowianką - Segal P. and Kikiela M. Oddz. Oczne. C.W.S.K., Łódź - POL. TYG. LEK. 1959, 14/4 (162-165) Graphs 1 Illus. 1

The infection, beginning in superficial parts, invaded the episclera and deep tissues. This was accompanied by inflammation of the vascular tunica and secondary parenchymatous inflammation of the cornea. During the acute phase,  $\gamma$ -globulin and chlortetracycline were administered, and after 6 weeks cortisone was applied topically. After a few months, plastic surgery was performed on the conjunctival sac, transplanting oral mucosa. A satisfactory result was obtained, with clearing of the cornea and satisfactory visual acuity.

(L, 12)

POLAND

SEGAL, Pawel, KIKIELA, Marian, MRZYGLOD, Stanislaw, and ZEROMSKA-ZBIERSKA, Izabela; Clinio of Eye Diseases (Klinika Chorob Oczu) WAM [Wojkowa Akademia Medyczna, Military Medical Academy] in Lodz (Director: Prof. Dr. med. P. SEGAL) and Eye Division (Oddzial Oczny), Military Hospital (Szpital Wojkowy) in Zielona Gora (Ordynator: Dr. M. KIKIELA)

"On the Coexistence of the Familiar Form of Pigmentary Degeneration of the Retina with Kartagener Triade. Case Report."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 23, 3 Jun 63, pp 809-812.

Abstract: [Authors' English summary modified] Authors report a case of Kartagener triade, pigmentary degeneration of the retina, and congenital cataract. They review briefly the literature of this problem, and note that the changes observed in this syndrome are always due to developmental difficulty or degenerative changes, and may therefore have common pathological elements with the classical symptoms of the Kartagener triade. There are 21 references, about evenly divided between Polish, German, and Western publications.

1/1

KIKIEWICZ, C.

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000722520006-7"

KIKIEWICZ, C. Protection of bridges during ice breaking and high water. p. 70. DROGOWNICTWO. Warszawa, Poland. Vol. 11. No. 3, Mar. 1956

SOURCE: East European Accessions List (EEAL) LC Vol. 5, No. 6, June 1956

KIKIEWICZ, Z.

Technological indexes of grinders. p. 189. (PRZEGLAD PAPIERNICZY, Vol. 13, No. 6, June 1954, Lodz, Poland)

SO: Monthly List of East European Accessions, (SEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.



MINI-MAX, 2.

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Chel.



KIKIEWICZ, Z.

The usefulness of Haug mills in the light of recent researches. p. 356.  
PRZEGLAD PAPIERNICZY. Lodz. Vol. 12, no. 12, Dec. 1955

Source: East European Accessions List, (EEAL), Lc, Vol. 5, No. 3, March 1956



KIKIEWICZ, Z.

POLAND/Chemical Technology. Chemical Products and Their  
Application, Cellulose and Its Production.  
Paper.

H-33

Abs Jour: Ref. Zhur-Khimiya, No 11, 1958, 38325.

Author : Kikiewicz Z.

Inst : Not given.

Title : Problems of Experimental Pilot Plant Installations in  
the Cellulose-Paper Industry.

Orig Pub: Przegl papiern, 1956, 12, No 6, 164-165.

Abstract: No abstract.

Card : 1/1

KIKIEWICZ, Z.

Determination of power supply for a grinder. p.235  
(PRZEGLAD PAPIERNICZY, Vol. 12, No.8, Aug. 1956, Lodz, Poland)

SO: Monthly List of East European Accessions (FEAL) LC, Vol. 6, No. 9, Sept. 1957, Uncl.



KIKIEWICZ, Z.

COUNTRY : Poland  
CATEGORY :

ABB. JOUR. : RZKhim., no. 16 1959, No.

59409

TITLE : Comparing the performance of the Hydr-Finer, the Jordan Mill, and the Continuous Rolls

ORIG. PUB. : Przegląd Papieru, 15, No 1, 3-9 (1959)

ABSTRACT : A study was made on Finnish sulfate cellulose and on domestic (Polish) cellulose; performance indexes for the above-indicated machines were calculated. It has been found that the hydr-finer is most economical to operate.

From author's summary

CARD: 1/1

KIKIEWICZ, Zbigniew, dr.inz.

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000722520006-7"

A research station for the grinding pulps in a continuous way.  
Przegl papier 18 no.2:58 F '62.

1. Katedra Papiernictwa i Maszyn Papierniczych, Politechnika, Lodz.

KIKIEWICZ, Zbigniew, dr.inz.

Research on the filtering efficiency of the pulpsaver FL-24. Przegl  
papier 18 no.6:177-181 Je '62

1. Katedra Papiernictwa i Maszyn Papierniczych, Politechnika, Lodz.

KIKIEWICZ, Zbigniew, dr inz.

Evaluation of the raw rag beating process by the combined  
batch-continuous method. Przegl papier 18 no.10:309-313  
O '62.

1. Katedra Papiernictwa i Maszyn Papierniczych, Politechnika,  
Lodz.

KIKIEWICZ, Zbigniew, doc. dr inż.; KAWKA, Włodzimierz, mgr inż.

Calculation of a spinning defibrator. Przegl papier 21 no.3:  
69-72 Mr '65.

1. Department of Paper Manufacture and Paper Machines of the  
Lodz Technical University.

KIKILASHVILI, T. Z.

Def. at  
Tbilisi State U.

9) სტუდენტური სამუშაოების სახელის რეზიუმეები

ა) მათემატიკის სახელის რეზიუმეები

915 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).  
916 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).  
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919 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).  
920 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).  
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924 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).

925 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).  
926 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).  
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928 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).  
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930 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).

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932 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).  
933 მეცნიერებათა ფილოსოფია ხელ. მთ. 50 სფ. 9 სფ. (ბათუმი 1947).

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711  
Dissertation for degree of  
Candidate Geographical Sciences



KIKILASHVILI, T.Z.; KORDZAKHIA, M.O.

Mudflows in the Alazani Basin. Trudy Geog. ob-va Gruz. SSR no.3:33-74  
'58. (MIRA 12:9)  
(Alazani Valley--Landslides)

KIKILASHVILI, T.Z.

Special features of the density of the Kvirila River system.  
Trudy Geog.ob-va Grus.SSR 4:145-152 '59. (MIRA 13:1)  
(Kvirila River)

KIKILASHVILI, T. Z.

Materials on the hydrography of the Iora River Basin. Trudy Geog.  
ob-va Gruz. SSR 5:199-214 '59. (MIRA 13:11)  
(Iora River--Hydrography)

KIKILASHVILI, T.Z.; APKHAZAVA, I.S.

Hydrology of the Khanistskali Basin. Trudy Geog. ob-va Gruz.  
SSR 7:119-139 '63. (MIRA 18:5)

KULEBAKIN, P.G.; DENISYUK, Ya.M.; KIKIN, A.A.

Determining the traction resistance of plows in relation to the  
physicomechanical properties of soil. Trakt.i sel'khoz mash. 31  
no.2:18-19 F '61. (MIRA 14:7)

1. Sibirskoye otdeleniye AN SSSR.  
(Flows) (Soil physics)

KIKIN, A. I., Engr. Cand. Tech. Sci.

Dissertation: "Investigation of the Magnitude of Forces Developed Between a Travelling Crane and its Track." Moscow Order of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev, 16 Jun 47.

SO: Vechernyaya Moskva, Jun, 1947 (Project #17836)

KIKIN, ALEKSANDR IVANOVICH

KIKIN, Aleksandr Ivanovich

KIKIN, Aleksandr Ivanovich (Moscow Order of Labor Red Banner Construction Engineering Inst. imeni Kuybyshev), Academic Degree of Doctor of Technical Sciences, based on his defense, 10 March 1955, in the Council of the Inst of Metallurgy imeni Pavlov of the Acad Sci USSR, of his dissertation entitled: "Peculiarities in the planning of steel structure of buildings and the erection of metallurgical plants when taking operating conditions into consideration," and Academic Title of Professor. Chair: "Steel Constructions". For the Academic Degree of Doctor of Sciences and the Academic Title of Professor.

SO: Priblizen' Ministerstva, Vysshego Obrazovaniya SSSR, List No 19, 24 Sept. 1955  
Decision of Higher Certification Commission Concerning Academic Degrees and Titles.

KIRIN, A.I., doktor tekhn. nauk, prof.

Relationship of service of steel structures in buildings and in  
bridge cranes. [Iss.] LONITOMASH 43:123-127 '57. (MIRA 11:6)  
(Structures, Theory of)



KIKIN, A.I., prof., doktor tekhn.nauk

Damage to reinforced concrete roofing slabs in hot-working shops  
of metallurgical plants. Prom. stroi. 38 no.10:47-50 '60.

(MIRA 13:9)

(Roofing, Concrete)

(Metallurgical plants)

VLADOVSKIY, Mikhail Semenovich; KOTLYAROV, P.F., inzh.; KIKIN, A.I.,  
doktor tekhn. nauk, prof., retsenzent; POPOVICH, N.A., kand.  
tekhn. nauk, dots., retsenzent; OKRAYNETS, G.A., kand. tekhn.  
nauk, dots., otv. red.; NESTERENKO, A.S., red.; TROFIMENKO,  
A.S., tekhn. red.

[Open crane gantries; performance and design] Otkrytye pod-  
kranovye estakady; deistvitel'naia rabota i proektirovanie.  
Khar'kov, Izd-vo Khar'kovskogo gos. univ. im. A.M.Gor'kogo,  
1961. 210 p. (MIRA 15:4)

(Cranes, derricks, etc.)

KIKIN, A.I., prof.; BELENYA, Ye.I., prof.; STRELETSKIY, N.S., prof.,  
doktor tekhn. nauk; LESSIG, Ye.N., dots.; LUKHANOV, K.K., dots.;  
DUBINSKIY, G.S., dots.; SHESTAK, G.A., dots.; IGNAT'YEVA, V.S.,  
dots.; KORDAKOV, V.M., dots.; GENIYEV, A.N., prof.; VEDENIKOV,  
G.S., dots.; TUBIN, S.M., kand. tekhn. nauk, nauchnyy red.;  
BEGAK, B.A., red. izd-va; OSENKO, L.M., tekhn. red.

[Metal construction; present state and outlook for future  
development] Metallicheskie konstruksii; sostoianie i pre-  
spektivy razvitiia. Pod obshchei red. N.S.Streletskogo. Mo-  
skva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materi-  
alam, 1961. 333 p. (MIRA 15:4)

1. Moscow. Moskovskiy inzhenerno-stroitel'nyy institut.
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Tubin, Begak, Osenko).

(Building, Iron and steel)

(Aluminum, Structural)

KIKIN, A.I.; RUSAKOV, I.F.; KOYENMAN, M.Kh.

Aspects of the functioning of longitudinal monitors arranged along the center rows of columns of industrial buildings. Izv.vys.-uch.zav.; stroi. i arkhitekt. 5 no.4:70-74 '62. (MIRA 15:9)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni inzhenerno-stroitel'nyy institut imeni V.V.Kuybysheva.  
(Factories—Design and construction)

LUBNIN, Aleksandr Il'ich, inzh.; LIBERMAN, Semen Ahramovich, inzh.;  
SKAZHENIK, Georgiy Dmitriyevich, inzh.; MILLER, Viktor  
Yakovlevich, inzh.; PETRAKOV, Andrey Ivanovich, inzh.;  
USHAKOV, Nikolay Alekseyevich, kand. tekhn. nauk; VAD'YAYEV,  
Gavriil Mikhaylovich, inzh.; TIMYANSKIY, Samuil Yakovlevich,  
arkh.; KIKIN, A.I., doktor tekhn. nauk, prof., red.; BEGAK,  
B.A., red.; SHERSTNEVA, N.V., tekhn. red.

[Designing buildings and structures for metallurgical plants]  
Proektirovanie zdaniy i sooruzheniy metallurgicheskikh za-  
vodov [By] A.I.Lubnin i dr. Moskva, Gosstroizdat, 1963.  
321 p. (MIRA 17:2)

1. Gosudarstvennyy institut proyektirovaniya metallurgiche-  
skikh zavodov (for Timyanskiy). 2. Gosudarstvennyy institut  
po proyektirovaniyu, issledovaniyu i ispytaniyu stal'nykh  
konstruktsiy i mostov (for Petrakov). 3. Tsentral'nyy nauchno-  
issledovatel'skiy i projektno-eksperimental'nyy institut pro-  
nychlennykh zdaniy i sooruzheniy (for Ushakov).

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Using graphic methods in the management of agricultural enterprises.  
Biul.nauch.inform.: trud i zar. plata 3 no.9:34-40 '60.

(MIRA 13:9)

(Graphic methods)

(Farm management)

KIKIN, B.I., kand.ekonom.nauk; SULKOVSKAYA, M., red.; SMIRNOVA, Ye.,  
tekhn.red.

[Problems in the management of machine-tractor stations]  
Voprosy upravleniia MTS. Moskva, Gos.izd-vo sel'khoz.lit-ry,  
1943. 95 p. (MIRA 13:1)  
(Machine-tractor stations)





KIKIN, B. I.

Machine-Tractor Stations

Administration in leading tractor brigades of machine-tractor stations, Post. sel'khoz.,  
No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

NIKIN, B.

Dispatching in agriculture. Biul.nauch.inform.: trud i zar.plata  
no.11:36-43 '59. (MIRA 13:5)  
(Radio in agriculture)  
(Machine tractor stations)

KIKIN, I .

SHUMYATSKIY, V., inzhener-mayor, dotsent, kandidat tekhnicheskikh nauk,  
laureat Stalinskoy premii; KIKIN, D., inzhener-mayor, kandidat  
tekhnicheskikh nauk.

On wave resistance in supersonic flight. Vest.Vozd.Fl. 34 no.12:  
62-73 D '51. (MLRA 8:3)  
(Aerodynamics, Supersonic)

S/040/63/027/002/013/019  
D251/D308

AUTHOR: Kikin, D. B. (Moscow)

TITLE: Extremal properties of the solutions of certain classes of partial differential equations of the second order and their application to the flow of gases

PERIODICAL: Prikladnaya matematika i mekhanika, v. 27, no. 2, 1963, 356-358

TEXT: In connection with the theoretical investigation of compressible and incompressible fluids the following theorem is established: If the differential operator  $L(u) = \Phi(x, y, u, u_x, u_y, u_{xx}, u_{xy}, u_{yy})$  is such that its application to any twice-differentiable function  $f(x, y)$  at its maximum  $N_0$  and in some neighborhood of  $N_0$  gives a non-positive value, and  $\Phi_{u_{xx}}(N_0) > 0$  or  $\Phi_{u_{yy}}(N_0) > 0$ , then the solution  $u(x, y)$  of the equation  $L(u) = 0$  cannot take a maximum at this point or in the considered neighborhood of it. The applica-

Card 1/2

Extremal properties of ...

S/040/63/027/002/013/019  
D251/D308

tion to gas dynamics and to problems of finding the relationship  
between the stream function and the velocity potential is shown.

SUBMITTED: December 12, 1962

Card 2/2

KIKIN, D.B. (Moskva)

Extremum properties of the solutions to certain classes of  
second-order partial differential equations and their applications  
to gas flows. Prikl.mat.i mekh. 27 no.2:356-358 Mr-Apr '63.  
(MIRA 16:4)  
(Differential equations, Partial) (Gas flow)

KIKIN, D.B. (Moskva)

Extremum properties of solutions to certain classes of second-order partial differential equations and their application to gas flows. Izv. vys. ucheb. zav.; mat. no.5:54-58 '62.

(U.S.S.R.)

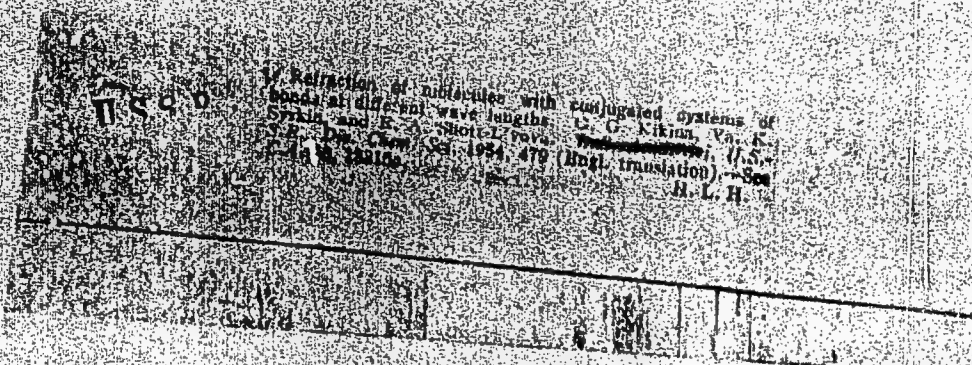
KIKIN, V.

Genuine businesslike aid is in order. Sov.profsoiuzy 4 no.4:51-52  
Ap '56. (MIRA 9:7)

1.Nachal'nik tsekha Voronezhskogo zhirokombinata.  
(Trade unions)



KIKINA, G. G.



Refraction of light with conjugated systems of  
atoms at different wave lengths. G. G. Kikina, V. A. K.  
S. S. and E. A. Mott. J. Chem. Phys. 1954, 21, 479 (Engl. translation). See  
H. L. H.

KIKINA, G.G.

USSR/Chemistry Refraction

Card : 1/1

Authors : Kikina, G. G., Syrkin, Ya. K., and Shott-L'vova, E. A.

Title : Refractions of molecules with conjugated bonds at different wave lengths

Periodical : Izv. AN ESSR, Ctd. Khim. Nauk, 3, 563 - 564, May - June 1954

Abstract : The relation between refraction and additiveness is discussed and the problem of determining refraction extrapolated in accordance with infinitely long waves, is explained. The molecular refraction was measured for eight substances (benzene, naphthalin, anthracene, phenanthrene, acenaphthene, triphenylmethane, p-benzoquinone and phenanthrene quinones) using seven different wave lengths and the results are shown in table. One USSR reference.

Institution : The M. V. Lomonosov Institute of Delicate Chemical Technology, Moscow

Submitted : February 16, 1954

KIKINA, M.I.

UGORETS, I.I.; LAVRENTENKO, K.D.; BONDAREV, N.M.; PLATONOV, N.A.;  
ACHKASOV, D.I.; MKHITARYAN, S.G.; SAVINYKH, A.I.; MALYUTIN, I.P.  
VLADIMIROV, P.N.; MOSKOVSKIY, F.A.; GEL'FAND, M.Z.; KABAYAN, N.M.  
BESPROZVANNYY, I.A.; KIKINA, M.I.; TRETIKOVA, Ye.M.

Nikolai Nikolaevich Romanov; obituary. Elek.sta. 27 no.4:63 Ap '56.  
(MLRA 9:8)

(Romanov, Nikolai Nikolaevich, 1906-1956)

L 49780-65 EPF(c)/EPR/IMP(j)/ENA(c)/ENT(1)/ENT(m) Po-4/Pr-4/Ps-4  
 IUP(c)/RPL WW/RM  
 UR/0058/65/000/003/D015/D015  
 ACCESSION NR: AR5012234

SOURCE: Ref. zh. Fizika, Abs. 30100

AUTHORS: Bolotina, E. M.; Kapshat, V. M.; Kravtsov, Ye. P.; Klovkovskiy, Yu. V.;  
 Kikina, V. S.; Sverdlov, L. M.

TITLE: Calculation and interpretation of vibrational spectra of molecules of  
 various classes

CITED SOURCE: Tr. Komis. po spektroskopii. AN SSSR, vyp. 1, 1964, 120-124

TOPIC TAGS: vibrational spectrum, organic molecule, isotopic substitute, force  
 field, double bond

TRANSLATION: A calculation was made of the normal vibrations, and a complete in-  
 terpretation is presented for the vibrational spectra of 25 molecules: cyclo-  
 butane, spiropentane, thiophane, cis-trans-dimethyldiborane, trimethylborane,  $C_2F_4$ ,  
 $C_2Cl_4$ ,  $C_2Br_4$ ,  $Fe_2C-CH_3$ ,  $ClFC-CH_2$ ,  $F_2C-CH_2$ , cis-trans- $C_2H_2F_2$ , cis-trans- $C_2H_2Br_2$ ,  
 and certain isotopic substitutes. The features of the force field of these mole-

Cord 1/2

L 49780-65

ACCESSION NR: AR5012234

cules are clarified. In particular, the strength of the C-C double bond increases upon successive substitution of the H atoms in ethylene by F atoms.

SUB CODE: NP, OP

ENCL: 00

352  
Cont 2/2

FRANK, K.; KIKINDAI, E.

~~XXXXXXXXXXXX~~  
Data on the prophylaxis and therapy of whooping cough in hospitalized sick. *Gyermekgyógyászat* 4 no.5:157-159 May 1953. (CIML 25:1)

1. Doctors. 2. Pediatric and Infectious Department (Head Physician -- Dr. Kalman Frank), Vas County Council Hospital, Szombathely.

ZAKHARIEV, Aleksandur; POPOV, Ivan; STANCHEV, Stancho; KIKINLOEV,  
Todor

Male and female sterility in certain varieties of sugar beets  
in Bulgaria. Selskoston nauka [2] no. 2: 162-167 '63.

GERD, S.V., doktor biol. nauk, nauchnyy red.[deceased]; KIKINOV, \_\_\_\_\_  
G.V., red.; GREYVER, I.K., tekhn. red.

[Transactions of the Syamozero Expedition]Trudy Syamozerskoi  
ekspeditsii. Petrozavodsk, Gos.izd-vo Karel'skoi ASSR.  
Vol.2.[Ichthyology, hydrobiology, and parasitology]Ikhtiolo-  
giia, gidrobiologiia i parazitologiia. 1962. 269 p.  
(MLA 15:10)

1. Syamozerskaya kompleksnaya ekspeditsiya, 1954-1956.  
(Syamozero—Freshwater biology)



VASIL'YEV, Ye.A., red.; YERMAKOV, V.I., red.; KALUZHNIN, S.A.,  
red.; KOSHILOV, N.F., red.; MATYUSHKINA, A.P., red.;  
KIKILOV, G.V., red.; RAYEVSKAYA, V.S., red.;  
SHCHETELNIKOVA, A.V., red.

[Materials of the Conference on the Overall Use of Wood]  
Materialy Konferentsii po kompleksnomu ispol'zovaniyu  
drevesiny. Petrozavodsk, Karel'skoe knizhnoe izd-vo,  
1962. 308 p. (MIRA 16:1)

1. Konferentsiya po kompleksnomu ispol'zovaniyu drevesiny,  
Petrozavodsk, 1961.

SECRET, 1. 1. 1. 1. 1. 1.

the preservation and care of such official documents, etc., etc.

SECRET, 1. 1. 1. 1. 1. 1.

GORBENKO, V.I., inzh.; VASSERMAN, A.Sh., inzh.; KIKISH, O.V., inzh.

Modernization of hyperbolic cooling tower. Elek. sta.  
36 no.12:27-30 D '65. (MIRA 18:12)

<div style="float: left; width: 30%;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">KIKVIDZE</div> <div style="margin-top: 10px; margin-left: 10px;">2A</div> </div> <div style="float: right; width: 70%; text-align: right;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> </div> <div style="clear: both;"></div>									
<div style="display: flex; justify-content: space-between;"> <span>1ST AND 2ND EDITIONS</span> <span>PROCESSING AND PROPERTIES INDEX</span> <span>MAP AND 2TH EDITIONS</span> </div>									
<p>Effect of the amplitude on the dispersibility of metallic lead. R. E. Kikvidze and V. J. Kokochevskii (Phys. and Geophys. Inst., Acad. Sci. Georgian S.S.R., Tbilisi). <i>Dokl. akad. sci. Georgian S.S.R.</i> 7, 331-6 (1946).—The kinetics of colloidal soln. of Pb filings in 90% alc. (20 g. Pb per 30 ml. alc.) under the action of mech. shaking at various amplitudes <math>A</math> (up to 30 mm.) were investigated along with the kinetics of the absorption of <math>O_2</math> responsible for the dispersion of the Pb. At const. <math>A</math>, both the amt. of Pb dispersed and of <math>O_2</math> absorbed are linear functions of time until satn. is reached; this occurs at the same stage for both processes. The reactions are thus shown to be of the 1st order; the rate of formation of the oxide film at the surface of the Pb grains is independent of the pressure of <math>O_2</math>. In terms of <math>A</math>, the slopes of the kinetic straight lines can be represented by <math>\tan \alpha = kA^n</math> with the following numerical values for <math>A = 2, 6, 8, 10, 12, 15</math> mm., resp.: amt. of Pb dispersed <math>\tan \alpha = 0.00099, 0.00737, 0.01212, 0.01620, 0.02653, 0.03817</math>; amt. of <math>O_2</math> absorbed, <math>\tan \alpha = 0.063, 0.472, 0.804, 1.212, 1.700, 2.256</math>; for the 1st process, <math>k = 0.00028</math>, for the 2nd, <math>k = 0.017</math>; for both processes, <math>n = 1.8</math>. The curves representing the variation of <math>\tan \alpha</math> with <math>A</math> for the 2 processes are convex to the axis of <math>A</math> and are very close. Dispersion is accompanied by a decrease of the size of the grains far in excess of the amt. of Pb dissolved, i.e., larger grains, particularly those of 0.64-1.1 mm., are broken up preferentially; it indicates that the attack by <math>O_2</math> occurs preferably on the intergranular matter of polycryst. aggregates, probably because of its lesser compactness.</p> <p style="text-align: right;">N. Thon</p>									
<div style="display: flex; justify-content: space-between;"> <span>ASB. 51A METALLURGICAL LITERATURE CLASSIFICATION</span> <span>81-17-1511</span> </div>									
<div style="display: flex; justify-content: space-between;"> <span>100000 SYMBOLS</span> <span>100000 MAP AND 2TH EDITIONS</span> <span>1000000 SYMBOLS</span> </div>									
<div style="display: flex; justify-content: space-between;"> <span>1000000 SYMBOLS</span> <span>1000000 MAP AND 2TH EDITIONS</span> <span>10000000 SYMBOLS</span> </div>									